

Mobile Solutions

VIA

Mobile360 System

Fanless ultra-compact
in-vehicle 360° surround view
surveillance & ADAS system



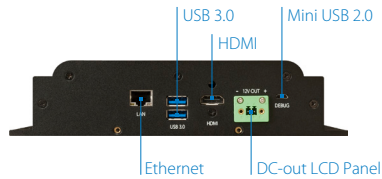
Features

- 360° real-time display with VIA Multi-Stitch technology utilizing up to six CSI/POC cameras
- 4G and GPS for remote monitoring with VIA E-Track
- Driver monitoring and license plate recognition options available
- ADAS speed detection, collision warning, blind spot warning, and lane departure warning options available
- 5+ years' longevity with vitality support and locked BOM option

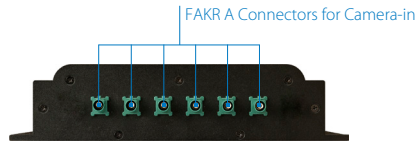
Specifications

Model Name	Mobile360 System
Processor	1.8GHz Cortex-A17 / 1.4GHz Cortex-A7 big.LITTLE octa-core SoC
System Memory	2GB Mobile LPDDR3 1600MHz RAM (Package-on-Package with SoC)
Storage	1 512GB Transcend 2.5" MLC SSD (-40°C-90°C) 16GB eMMC Flash memory 1 Micro SD card slot
Wireless Connectivity	1 4G LTE module 1 Wi-Fi 802.11b/g/n + Bluetooth 4.0 module 1 GPS receiver
Camera Connectivity	6 FAKRA connectors
I/O Connectivity	1 HDMI port 3 USB 2.0 ports (1 lockable) 1 Mini USB 2.0 port (for debugging) 1 D-sub connector for CAN Bus 2 DIO ports (4 GPI + 4 GPO) 1 Gigabit Ethernet port 2 Audio jacks: Line-out and Mic-in 3 Antennas for 4G, GPS and Wi-Fi
Power Supply	9-36V DC-in with ACC/IGN
Operating System	Android 5.0
VIA Smart ETK	RTC Wake-up, Suspend, Watchdog timer, CAN Bus, GPIO
Operating Temperature	-20°C ~ 65°C
Storage Temperature	-20°C ~ 70°C
Vibration Loading During Operation	With SSD: ISO-16750-3 Mechanical Loads, test VIII Equipment mounted on decouple commercial vehicle Cab. Longitudinal (X) : 1.20Grms, Lateral (Y) : 1.34Grms, Vertical (Z) : 2.17Grms , 32hr/axis
Shock During Operation	With SSD: 50G, ISO-16750-1:2003, Half-sine wave, 6 directions, 6ms, 10 per direction
Mechanical Construction	Aluminum top cover Metal chassis housing
Dimensions	215mm(W) x 48mm(H) x 282mm(D) (8.46" x 1.99" x 11.1")
Weight	3.5 kg (7.7lbs)

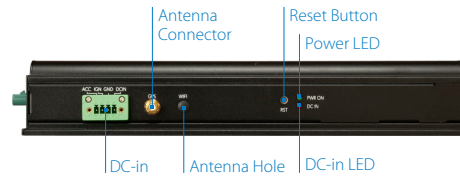
Front Panel External I/O



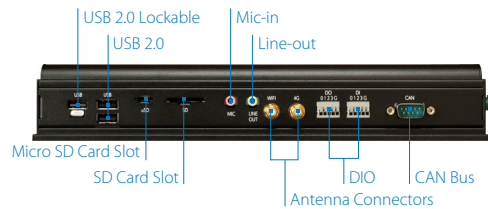
Back Panel External I/O



Left Panel External I/O



Right Panel External I/O



VIA Mobile360 Surround View Sample Kit

Item	Description	Quantity	Price
VIA Mobile360 System	Ruggedized VIA Mobile360 System supporting: - Six FAKRA connectors for real-time camera inputs - 512GB SSD (-40-90) for event storage - 4G modem for remote access	1	US\$1,800
FOV-190 Cameras	Sharp 1.2MP FOV-190 automotive-grade camera with Gen-Lock (Frame Syncing) for superior image stitching output, including 10M FAKRA cable	4	US\$1,300
7" Monitor	7" automotive-grade HD resistive touch monitor with VESA mount support	1	US\$400
		Total	US\$3,500

VIA Mobile360 ADAS Sample Kit

Item	Description	Quantity	Price
VIA Mobile360 System	Ruggedized VIA Mobile360 System supporting: - Six FAKRA connectors for real-time camera inputs - 512GB SSD (-40-90) for event storage - 4G modem for remote access	1	US\$1,800
FOV-50 Cameras	Sharp 1.3MP FOV-50 automotive-grade camera including 10M FAKRA cable	4	US\$2,000
7" Monitor	7" automotive-grade HD resistive touch monitor with VESA mount support	1	US\$400
		Total	US\$4,200

VIA Mobile360 Expansion Options

The functionality of VIA Mobile360 Surround View and VIA Mobile360 ADAS can be expanded through the integration of up to two additional automotive-grade FOV-190 or FOV-50 cameras.

***Enhanced Surround View:** Up to two additional Sharp 1.2MP FOV-190 automotive-grade cameras with Gen-Lock (Frame Syncing) for enhanced 360° capture and stitching capabilities on longer vehicles.

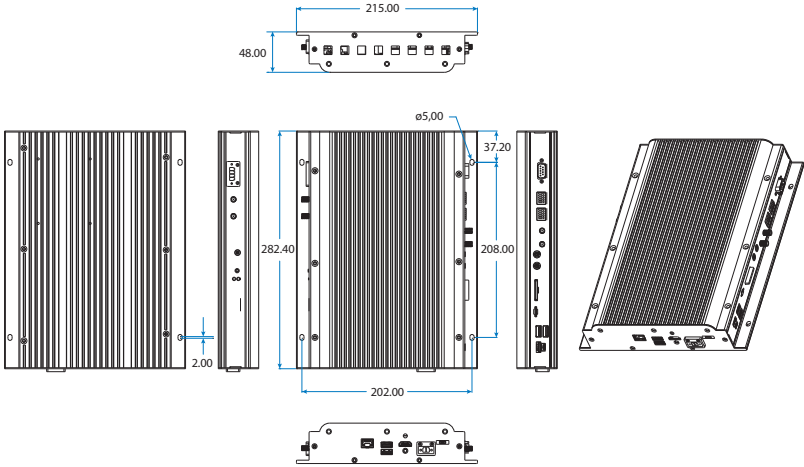
***Partial ADAS:** Up to two Sharp 1.3MP FOV-50 automotive-grade cameras for the front/rear or right/left sides of the vehicle.

Computer Vision: Up to two Sharp 1.3MP FOV-50 automotive-grade cameras to enable enhanced E-Track capabilities such as driver monitoring, cargo monitoring, and license plate recognition.

***VIA Mobile360 Surround View only**

Part Number	Description	Unit Price
FOV-190 Camera	Sharp 1.2MP FOV-190 automotive-grade camera with Gen-Lock (Frame Syncing) and 10M FAKRA cable	US\$325
FOV-50 Camera	Sharp 1.3MP FOV-50 automotive-grade camera including 10M FAKRA cable	US\$500

Dimensions



Unit: mm